ABDOMINAL TRAUMA

RIFLES LIFESAVERS

Abdominal Trauma: The KEY to Saving Lives

- The abdomen is the “Black Box”
  - I.e., it is impossible to know what specific injuries have occurred at initial evaluation
- The key to saving lives in abdominal trauma is NOT to make an accurate diagnosis, but rather to recognize that there is an abdominal injury

Examples of Abdominal Injuries

- Blunt Trauma
  - Aortic rupture
  - Splenic rupture
  - Liver rupture or laceration
  - Diaphragmatic tear
  - Pelvic fracture
  - Intestinal tear
  - Bladder rupture
- Penetrating Trauma
  - Laceration of blood vessels
  - Splenic rupture
  - Liver rupture or laceration
  - Kidney laceration
  - Intestinal lacerations
  - Bladder rupture

Causes of Abdominal Injuries

- BLUNT TRAUMA
  - Motor vehicle accidents
  - Auto vs. pedestrian
  - Falls
  - Blast injuries
- PENETRATING TRAUMA
  - Gunshot wounds
  - Stab wounds
  - Shrapnel wounds
  - Impalements

Signs and Symptoms of Abdominal Injuries

- Blunt Trauma
  - Significant mechanism
  - Abdominal pain
  - Distension
  - Discoloration of abdomen or flank
  - Unexplained shock
- Penetrating trauma
  - Visible truncal injury including chest or abdomen
  - Abdominal pain
  - Bleeding
  - Impaled object
  - Evisceration
  - Shock

Blunt Abdominal Trauma

Flank ecchymosis from internal bleeding

Blunt Abdominal Trauma

- Compressive or shearing forces may deform and rupture abdominal organs
- Bruising across the lower abdomen is characteristic of a seat belt injury
- Visible signs may not reflect severity of underlying injury

The Seat Belt Sign

Penetrating Abdominal Trauma

- Visible wounds may not reflect severity of underlying injury
- Significant internal bleeding likely
- Bowel injury likely
- Patient may be in shock

Abdominal Injuries: CARE UNDER FIRE

- Casualty and RLS/medic return fire
  - ““The best medicine on any battlefield is fire superiority”
- Apply tourniquet to severely bleeding extremities
- Wounded soldiers who are unable to fight should lay flat and motionless if no cover is available or move as quickly as possible to any nearby cover

Abdominal Injuries: TACTICAL FIELD CARE

- Remember the ABCs
- Position casualty on back with flexed knees
- Expose the wound
- Stabilize any protruding objects
- Cover protruding abdominal organs with moist gauze or cloth
- Prepare to evacuate to surgical assets
  - 9-line MEDEVAC

Evaluation and Examination

- Visually note wounds and abrasions
- Palpate abdomen for localized vs. diffuse tenderness
- Consider possible internal injuries
- Diffuse, severe tenderness is a sign of internal bleeding

Don’t forget the back

- Turn the casualty over when you can do so safely
- Visually inspect back
- Palpate ribs, spine, sacrum for tenderness and irregularities
- Dress the wound with an occlusive dressing
- Don’t count on a “down-side sweep” to discover injuries this size

Impalement Injury

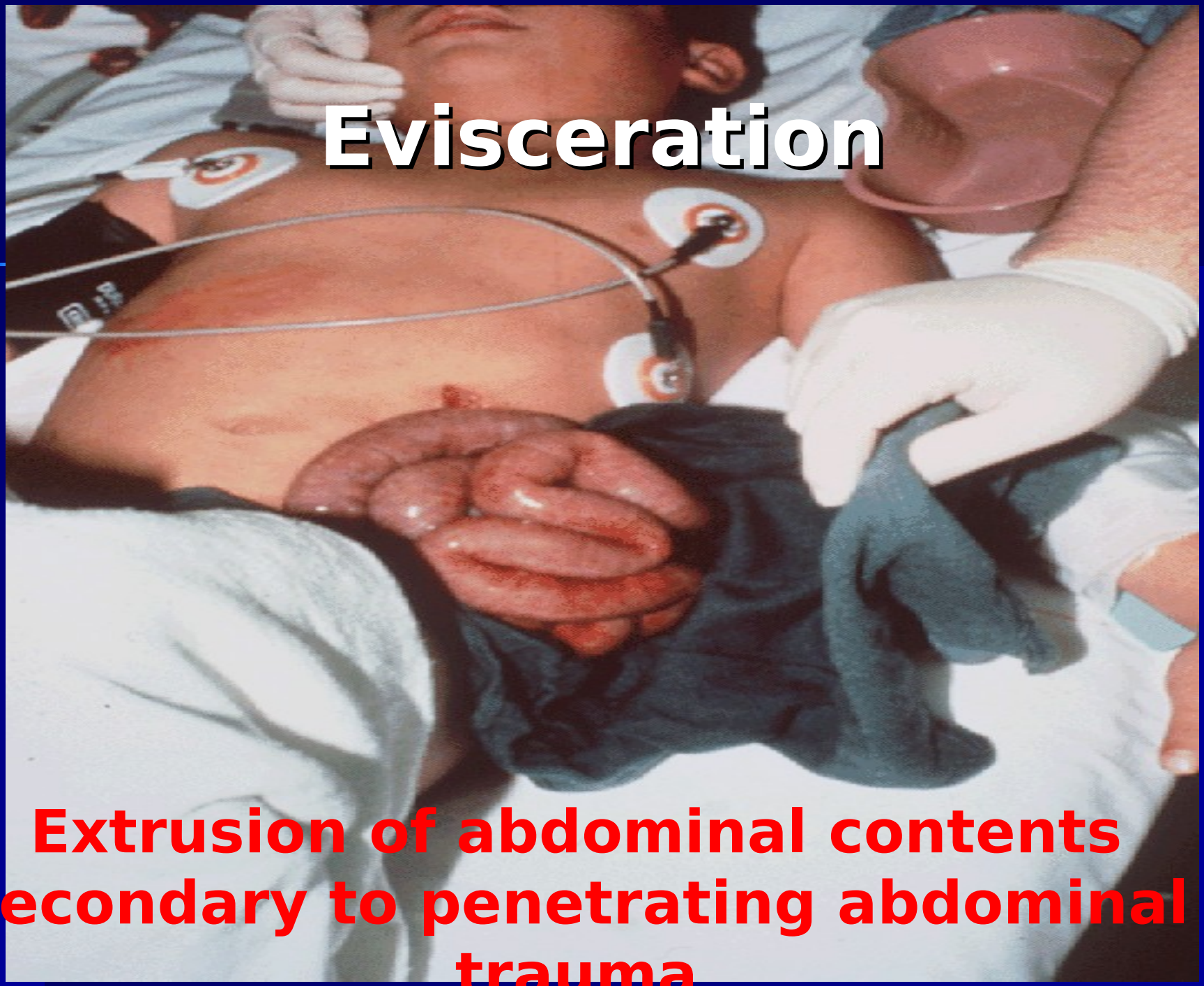
Impalement Injuries

- **DO NOT REMOVE OBJECT OR EXERT ANY FORCE UPON IT!**
  - Severe bleeding may occur causing shock
- Check pulses distal to impaled object
- Immobilize the object
- Apply bulky support bandages to hold in place

Impalement Injuries: How to make a SAM Splint

- Make a box shape large enough to surround the object and dressings
- Cut V notches into box top
- Place box over object and dressings and tape in place
- Tie cravats or ACE Wraps around torso for stability, using V notches in box to ensure stability

Evisceration



Extrusion of abdominal contents secondary to penetrating abdominal trauma

Management of Evisceration Injuries

- Use sterile side of dressing to place protruding organs near the wound (NOT into wound)
- Cover organs and wound completely with sterile or clean moist dressing
- DO NOT APPLY PRESSURE TO WOUND or expose internal parts
- Tie dressing tails loosely around wound
- Prepare evacuation to surgical assets

QUESTIONS?